

REMARKS

This application has been carefully reviewed in light of the Office Action dated December 30, 2005. The following claims are in the application: Claims 1, 3 to 13, 15, 17 to 19, 27, 41, 42, 45, 47 to 51, 88 to 90, and 93 to 97. Of those claims, Claims 1, 51, 93 and 95 to 97 are independent. Reconsideration and further examination are respectfully requested.

Turning first to a formal matter involving the citations of record, the Office Action included a rejection over U.S. Patent 5,748,858 (Ohtsuka), but the Ohtsuka patent is not now formally of record. It is respectfully requested for the Examiner to make this patent formally of record, such as by listing it on a form PTO-892.

Turning to the merits of the Office Action, all claims were rejected under 35 U.S.C. § 103(a), primarily over U.S. Patent 5,754,184 (Ring) in view of U.S. Patent 6,628,826 (Gilman). Thus, independent Claim 1 was rejected over Ring in view of Gilman; independent Claim 51 was rejected over Ring in view of Gilman and further in view of U.S. Patent 6,037,950 (Meir); and independent Claim 93 was rejected over Ring in view of Gilman, and further in view of Ohtsuka. The remaining claims were all dependent claims, and were rejected as above or further in view of U.S. Patent 6,249,315 (Holm). The rejections are respectfully traversed.

The invention concerns transformation of color image data from a source device into color image data for rendering by a destination device. According to one aspect of the invention, a color transform is constructed based on color characteristic data. The

color transform is constructed by using a color transform generator which forms part of a color management module.

By virtue of the foregoing construction, in which a color transform is constructed based on color characteristic data, the color transform can be constructed based on actual color characteristic data, thereby enabling color transform techniques to adapt flexibly to actual color characteristic data, rather than on a potentially inferior attempt to model the data.

In entering the rejection of Claim 1 over Ring in view of Gilman, the Office Action conceded that Ring does not directly discuss source device color characteristic data that contains colorimetric data and corresponding device signal data. For this, the Office Action relied on Gilman, and asserted that the teachings of Ring reasonably implied that the teachings of Gilman should be used. However, as Applicants understand Gilman, although it might be true that Gilman's Figure 3B describes device profiles such as a capture device profile 60 and a display device profile 62, Gilman's profiles do not contain colorimetric data and corresponding device signal data. Rather, as clearly shown in Gilman's Figure 3A, the colorimetric data 40 and device code values 44 are regressed out of the profile by using polynomial model 46 and least-squares regression 42. As a result, profile 48 does not contain either of colorimetric data or corresponding device signal data. Thus, it cannot be said that the combination of Ring and Gilman construct a color transform based on color characteristic data, as set out in independent Claim 1 herein.

Moreover, Claim 1 has been amended so as to emphasize that the color transform is generated by a color transform generator that forms part of a color

management module. Thus, in constructing the source color transform of Claim 1, the source color transform is constructed by using the color transform generator of the color management module based on the source device color characteristic data.

It is therefore respectfully submitted that independent Claim 1 is in condition for allowance.

With respect to independent Claim 51, the Office Action asserted that Meir shows a standard predetermined format for storage of source device color characteristic data. However, as understood by Applicants, even though Meir apparently formats his device profile according to an ICC profile format specification, the content of Meir's device profile differs significantly from the source device color characteristic data set out in independent Claim 51. Specifically, according to independent Claim 51, the source device color characteristic data has a plurality of tags containing the source device color characteristic data and a set of viewing condition data corresponding to a set of viewing conditions in which the source device color characteristic data was measured. Nothing in Meir (or in Ring or in Gilman) describes a set of viewing condition data, much less a set of viewing condition data corresponding to a set of viewing conditions in which source device color characteristic data was measured. Meir contains one brief mention of a viewing environment, but the viewing environment is not stored.

Moreover, independent Claim 51 has been amended so as to emphasize that the color transform is constructed by using a color transform generator that forms part of a color management module, and it is noted that the color transform is also constructed by using a color appearance model.

It is therefore respectfully submitted that independent Claim 51 is fully in condition for allowance.

With respect to the rejection of independent Claim 93, the Office Action conceded that Ring fails to teach generation of source and destination and device gamut boundary descriptions. It was asserted that Ohtsuka discloses generation of these gamut boundary descriptions. However, Applicants do not see anything that might correspond to a gamut boundary description in Ohtsuka, and certainly do not see anything concerning the generation of both source and destination device gamut boundary descriptions from colorimetric data included in color data files, as set out in independent Claim 93.

Moreover, Claim 93 has been amended so that a source color transform and a destination color transform are constructed by using a color transform generator that forms part of a color management module.

It is therefore respectfully submitted that independent Claim 93 is fully in condition for allowance.

Claims 95 to 97 are independent claims directed to apparatuses that roughly correspond to the methods performed by independent Claims 1, 51 and 93, respectively. Allowance of Claims 95 to 97 is also respectfully requested.

Applicants' undersigned attorney may be reached in our Costa Mesa, CA office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael K. O'Neill", written over a horizontal line.

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